



**Office of Local Programs**

**Process Review 96-04**

**Construction Administration**

**FINAL REPORT**

Recommended Approval

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Approved

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## **Executive Summary**

Process Review 96-04 entailed spot-checking of selected local agency administered construction projects in four districts (2, 6, 8 & 11). The review was to examine how local agencies are handling construction administration of their Federal-aid project now that Caltrans no longer provides oversight of construction activities on local agency Federal-aid projects off the State highway system. With the reengineering of the Local Assistance program, local agencies must certify, at project completion, that the project was constructed in compliance with all State and Federal contract administration requirements.

The review was conducted during the spring of 1997 on ongoing projects. Ongoing projects were selected because if deficiencies were found, it was hoped, that correction could be made so that the local agency would not lose their Federal-aid funds. Ongoing projects were also selected to check and see how local agencies are handling traffic around and through their construction projects.

Of the 12 local agencies that were reviewed, five were found to have major project deficiencies. Four of the local agency projects had major project deficiencies to the extent that their progress payments of Federal-aid funds from the State were withheld until the local agencies took correct action. At this time, one of the local agencies still has their progress payment on hold. One other local agency would have had their progress payments placed on hold for deficiencies except that local agency had not processed a program supplement, or a PR2, to be able to receive progress payments. If these five local agencies had been audited after their projects were completed the local agencies would have lost all or part of the Federal-aid funding for their projects.

Those local agencies, that were reviewed, were given customer survey poll to complete and return. The survey was largely ineffective because only five survey forms were returned. Of those five, only one local agency took the time to completely fill out the form.

Considering the results of the process review, six recommendations are presented in this report. In summary these six recommendations are:

- Develop a Local Agency and a Resident Engineers certification checklist for the Federal contract administration requirements.
- Begin mini construction administration process reviews.
- Continue this process review again next year in four other districts.
- Require the District Local Assistance Engineers (DLAEs) to verify that the local agencies have a Quality Assurance Program (QAP) prior to the DLAEs approving any of the local agency's "Request for Authorization" for construction.
- Continue to offer at least two sessions of the Local Agency Resident Engineer Academy each year and offer the new ITS Construction Administration course in all districts at least once.
- Make modification to the draft of the Local Assistance Procedures Manual based on the findings.

## **CONSTRUCTION ADMINISTRATION**

### **A. BACKGROUND**

Prior to reengineering of the Local Assistance program, Caltrans provided oversight of local agency's award and administration of Federal-aid projects. Construction oversight included approval for the local agency to administer projects, concurrence with award, Labor and DBE compliance, contract change order approval, periodic project site reviews, project records reviews, independent assurance testing, and final inspection.

With the issuance of LPP 95-07 "Reengineering" and subsequent LPPs, local agencies now certify that they have completed the project in compliance with all State and Federal contract administration requirements. The only time Caltrans visits the project is when the local agency notifies the DLAE of project completion and acceptance. At that point the DLAE will visit the project to verify the project was constructed according to the scope of the project described in the project authorization.

### **B. PURPOSE AND OBJECTIVES OF REVIEW**

The purpose of this review was to examine how local agencies are handling construction management of their Federal-aid project now that Caltrans no longer provides oversight of construction activities on local agency Federal-aid projects off the State highway system.

The objective of the review was to determine if there are any areas in the OLP procedures that might need further clarification or need to be expanded before the new *Local Assistance Procedures Manual* (LAPM) is issued.

### **C. REVIEW APPROACH**

The review consisted of a review team spot-checking local agency's construction project files and review of the job site on active construction projects during the Spring of 1997. Checking was done in four districts (2, 6, 8 & 11). The review team members were: Rick Gifford - OLP - Process Review Engineer, Peter Lee -FHWA Transportation Engineer, Ron Jespersen - ESC - Structures Local Assistance (for bridge projects), Dale Widner - District 2 Local Assistance (for District 2 projects), David Franke - District Local Assistance Engineer - 06 (for District 6 projects), Lyle Gustafson - District 8 Local Assistance (for District 8 projects) and Don Pope, District 11 Local Assistance (for District 11 projects). Twelve different local agencies were reviewed. The type of project that was reviewed varied from a small traffic signal project to a major bridge project. The type of local agency that was reviewed varied also from small rural cities and counties to large urban cities and counties.

Review of local agency's construction files consisted of those items that are required by LPP 95-07 Attachment 8 "Construction Administration and LPP 96-03 "Local Quality Assurance Programs". A survey form, "PR 96-04 Construction Administration Survey Form for Federal-aid Projects", was prepared based on the requirements in those LPPs, copy attached.

At the end of each review with the local agency, the local agency was given a Customer Satisfaction Survey, copy attached. The survey was to get local agency's impression of LPP 95-07 (Reengineering), LPP 96-03 (Local Quality Assurance Programs) and Caltrans assistance to local agencies with construction administration.

## **D. FINDINGS, OBSERVATIONS AND RECOMMENDATIONS**

### **FINDING 1.**

Of the 12 local agencies that were reviewed; seven projects were found to have one or more minor project deficiencies, and five were found to have one or more major project deficiencies. Because of the major deficiencies found in the local agency's construction administration procedure, four had their progress payments from the State suspended. One additional local agency would have had their progress payments suspended, except, they did not have an executed Program Supplement or PR-2 for their project and had not submitted any invoices. At this time most of the major deficiencies have been corrected except for one local agency that still has their progress payments suspended. On the seven projects where minor deficiencies were found, the local agencies were advised to correct the deficiencies. No action was taken against the local agencies because established procedure was not clear on what action should be taken. Attached is a table summary of the deficiencies found during the process review.

The major project deficiency items that caused the progress payments to be suspended and the number of local agencies that had these deficiencies are:

- Two had not been checking certified payrolls to make sure the contractor was paying Federal prevailing wage rates.
- Three did not have documentation to show that the DBEs listed on the DBE Information Form had actually performed a commercially useful function on the project.
- Three did not have documentation to show that iron and steel products purchased for and incorporated into the project had met the "Buy America Requirements".
- One did not physically incorporate the form FHWA-1273 into their construction contract.

The minor project deficiencies found are:

- Using HUD's package of standard Federal-aid specifications instead of FHWA's.
- Not conducting employee interviews.
- Not adhering to Traffic Control Plan (see Finding 6).
- Not including On-the-Job Training (OJT) goals in the contract.
- Not having a QAP on file (see Finding 2).
- Were not doing materials testing.
- No source documentation to backup progress payments (see Finding 5).

OBSERVATION 1.

The Resident Engineers, for the projects where the major project deficiencies were found, gave the impression that they were not knowledgeable about what their duties were for administration of Federal-aid requirements. Their main emphasis was to make sure that the project was constructed according to the plans and specs. Federal-aid requirements were a secondary item that they got to if and when they found time.

The Resident Engineers, for the projects where the minor deficiencies were found, were aware that they had a Federal-aid project and that Federal-aid projects require additional administration responsibilities. The problem was they were not aware of all their responsibilities when they administer a Federal-aid contract.

RECOMMENDATION 1.

Local agencies and Resident Engineers for Federal-aid projects need to be made aware and held accountable for compliance with the Federal-aid requirements. Two separate construction administration certification checklists should be developed. One describing the local agency's procedures for project advertisement, award and contract administration that would be signed by the Local Agency's person "In Responsible Charge". The other is a project specific checklist for the Resident Engineer to sign. The local agency would have to complete and sign their checklist only once a year, but a copy would have to be submitted with each "Request for Authorization" for construction. The Resident Engineer would be required to sign the checklist at the beginning of each project. The Resident Engineer's certification checklist should be required to be submitted with the local agency's contract award information and request for PR-2. Both checklists would summarize Federal-aid construction administration requirements that are found in the *Local Assistance Procedures Manual*. Future construction administration process reviews and mini process reviews would use the local agency's completed checklist as reference when conducting the review of the local agency's project.

This process review should be continued next year in four other districts.

A Mini-construction administration process review should be developed that has selected local agencies completing a questionnaire(s) and/or submitting contract documentation for specific projects to the DLAE or the Process Review Engineer. Failure of a local agency to submit the questionnaire and documentation, within a set period of time, should result in withholding of funds for the specific projects. This process has worked successfully on PR 96-05 Subcontracting - Contract Compliance. Abnormalities in the questionnaire and documentation can also be used as justification to do a full construction administration process review of a local agency's project.

**FINDING 2.**

None of the local agencies surveyed had a Quality Assurance Program (QAP) on file. LPP 96-03 requires the following:

- For non-NHS projects, local agencies are to document their QAP.
- The QAP is to be approved by the Public Works Director.
- The QAP is to be on file for State Review.

When questioned about why they did not have a QAP on file, all the Resident Engineers said they were not aware of the QAP requirement. Several of the Resident Engineer's supervisors were also asked about the lack of QAPs. They were also not aware of the requirement.

Even though the local agencies did not have a QAP, eight local agencies did have set procedures for materials testing that included assurance testing with cross checking, independent assurance testing, and manufactured materials testing.

**OBSERVATION 2.**

When LPP 96-03 was issued, it had a requirement for local agencies to have a QAP but there were no consequences if the local agencies did not establish one. Unless there is an urgency to implement a change in procedure, most local agencies will put off responding to change until they are affected by not complying.

**RECOMMENDATION 2.**

It will be required for the DLAEs to verify that the local agencies have a QAP prior to the DLAEs approving any of the local agency's "Request for Authorization" for construction. Local agencies should be informed, by letter, of this new requirement before it is implemented so that they have time to establish their QAP. Instruction on how to prepare a QAP should be included in the letter.

**FINDING 3.**

Local agencies that were doing a good job handling the construction administration of their Federal-aid project based part of their success on the guidance they received from their Caltrans District Construction Oversight representative. This was prior to reengineering and what the local agencies learned at the Resident Engineer Academy and what was learned at ITS/FHWA Contract Administration Core Curriculum course.

**RECOMMENDATION 3.**

Training will continue to be offered at least two sessions (one north and one south) of the Local Agency Resident Engineer Academy each year. Have the new ITS Construction Administration courses offered at least once in all the districts.

**FINDING 4.**

Giving a customer survey poll to each of the local agencies, at the end of each review, was largely ineffective. Of the 12 survey forms that were giving out only five were returned. Of those survey forms that were returned only one was filled out completely. The other four had the rating factors entered and limited response to the questions.

**OBSERVATION 4.**

Giving the local agency the survey form after the on-site review is completed, did not produce the results that were expected. Expecting the local agency to complete the survey form, and return it in the return envelop furnished, seemed like a good idea when first proposed. Once the on-site review was completed, it appeared that the local agency's Resident Engineer set the survey form aside because they had other matters to handle.

**RECOMMENDATION 4.**

If a customer survey poll is part of the next construction administration process review, then, it should be given to the local agency's Resident Engineer at the beginning of the on-site review. Resident Engineer would be expected to complete the questionnaire while the process review team is reviewing their project files. From past experience, while the process review team is reviewing the project files, the Resident Engineer is present and has time to complete the survey form.

**FINDING 5.**

A check was made of the local agency's accounting procedures to see if local agencies were following Federal-aid rules by not billing the State in advance of their payments to the contractor. Federal-aid rules require local agencies to seek reimbursement for payments they have made to the contractor. Review found no local agency seeking advance payments.

The review of the local agency's accounting procedures did find that six local agencies did not have source documentation that support payments made to the contractor. Instead, the local agencies had their contractors submit a estimate of work done to date. The local agency's project inspector would review the contractors estimate. The Resident Engineer would approve the estimate based on the inspectors recommendations. There were no source documents in the files to support the inspector's recommendations. The Resident Engineers stated that their inspectors keep a personnel daily diary of all their activities. The inspectors diaries do not become part of the project files because it is a record of the inspector activities, not a project record. Also, more than one project is covered in the diary.

**OBSERVATION 5.**

What was found, that was surprising, was that most local agencies are not seeking reimbursement promptly. Four local agencies were prompt with their invoice for reimbursement. One was slow, about three months behind. The other seven local agencies had not invoiced Caltrans for reimbursement on progress payments they had already made to their contractors. These were not projects that just started, or short duration projects that warrant a single invoice. These seven projects had estimates of several months to construct, and the local agency had already made several progress payments to their contractors out of their own funds.

**RECOMMENDATION 5.**

The LAPM should be modified to reinforce the requirements for the administering agency to prepare source documents supporting progress payments made to the contractors. A future mini process review should be conducted, after LAPM is issued, to check to see if local agencies have source documents that support progress payments made to their contractors.

While it is not a compliance problem, the slowness of billing could be an item to monitor on future construction administration process reviews. The new LAPM will have expanded procedures for invoicing and billing that should clear up any confusion that local agencies might have on invoices and billing procedures. More important, a future process review will check to see if local agencies are submitting their Final Report of Expenditure (including final invoice) promptly, and if they are not, a cause should be determined.

**FINDING 6.**

A review of the project sites found most local agencies are doing a good job of traffic control in and around their construction work zones. A few minor traffic control deficiencies were noted. The deficiencies noted was improper lanes closure and not enough delineation around pedestrian obstructions. Once the deficiencies were brought to the attention of the Resident Engineer, corrective action was taken.

**RECOMMENDATION 6.**

Monitoring should continue to review construction work zones for conformance with Federal-aid requirements when doing future Construction Administration process reviews.



Note: Local Agencies’ name and number removed so as not to embarrass anyone

PR 96-04 Construction Administration - Summary of Findings

Local Agency	Project Number	% Complete	Invoiced	1273	Labor (1)	Interviews (2)	OJT (3)	DBE (4)	Traffic Safety(5)	QAP (6)	Materials (7)	Buy America (8)	Environmental (9)	Source Documents (10)
Agency	STPL-####(015)	15	have not	included	yes	yes	N/A	yes	yes/yes	no	yes	yes	yes	yes
Agency	BRLO-####(050)	60	promptly	included	yes	yes	no/yes	yes	yes/yes	no	yes	yes	yes	yes
Agency	CMLM-####(20)	80	have not	included	no	no	N/A	no	yes/yes	no	no	yes	yes	no
Agency	STPLX-####(027)	75	promptly	included	yes	yes	N/A	yes	yes/yes	no	yes	yes	yes	yes
Agency	STPLE-####(008)	95	slow	HUD	yes	yes	N/A	yes	yes/yes	no	yes	yes	yes	no
Agency	STPLHG-###(003)	70	have not	included	no	no	N/A	no	N/A	no	N/A	no	yes	no
Agency	CML-####(004)	35	have not	included	yes	no	N/A	yes	yes/no	no	N/A	yes	yes	no
Agency	STPLG-####(028)	35	have not	included	yes	yes	N/A	yes	yes/yes	no	yes	yes	yes	yes
Agency	STPL-####(008)	95	have not	included	yes	no	N/A	yes	yes/no	no	yes	no	yes	no
Agency	STPLHG-###(002)	60	have not	HUD	yes	no	N/A	yes	yes/yes	no	no	no	yes	no
Agency	BRLS-####(008)	65	promptly	no	yes	a few	no/yes	no	yes/yes	no	yes	yes	yes!!	yes
Agency	BRLO-####(002)	75	promptly	yes	yes	yes	N/A	yes	yes/yes	no	yes	yes	yes	yes

- (1) Labor Compliance - Spot-checking payrolls against diaries
- (2) Conducting employee interviews
- (3) Have OJT goals in contract and are checking on goals. OJT goals not required for small projects.
- (4) Local Agency checking for DBE Compliance.
- (5) Is there a Traffic Control Plan and are they adhering to it.
- (6) Does the Local Agency have a Quality Assurance Program (QAP) as required in LPP 96-03.
- (7) Is the Local Agency performing materials testing and cross checking as required.
- (8) Is the Local Agency in compliance with Buy America requirements, all iron and steel products be manufactured in the US.
- (9) Is the construction of the project adhering to the environmental mitigation requirement for the project.
- (10) Has the local agency prepared source documentation to support progress payments made to the contractor.

**PR 96-04 Construction Administration  
Survey Form for Non-NHS Projects**

Note: It is possible that not all the items listed below will be surveyed during the period allocated for each local agency survey. The team, prior to conducting the survey, should set a priority order for the items to be covered (except for those items that are mandatory - which should be checked first) and also divide up the items.

**Local Agency:** \_\_\_\_\_ **Project No.** \_\_\_\_\_  
**Reviewed by:** \_\_\_\_\_  
**Date:** \_\_\_\_\_ **Contract Amount \$** \_\_\_\_\_ **% Work Complete** \_\_\_\_\_  
**Type of Work:** \_\_\_\_\_ **Location:** \_\_\_\_\_

**Project Staffing:**

Is there a list of names and titles of all staff assigned to the project?  
yes ☐ no ☐, comments:

Who is the Resident Engineer, is that person in responsible charge of the project?  
yes ☐ no ☐, comments:

**\*Authorization:**

What is the date of the "Authorization to Proceed with Construction"? (Receive from DLAE)

What was the date the project was advertised?

What was the bid opening date?

**\*Project Files:**

Are the files in an established order?  
yes ☐ no ☐, comments:

Index, local agency standard for all jobs or just federal-aid jobs  
yes ☐ no ☐, comments:

**Resident Engineer's/Construction Inspectors Daily Diaries:**

Are they current, thorough and neat?  
yes ☐ no ☐, comments:

**\*Construction Records and Accounting Procedures:**

Is the detailed Estimate and Finance Letter in the project files  
yes ☐ no ☐, comments:

Does the RE know the amount of Federal-aid funds encumbered for the project?  
yes ☐ no ☐, comments:

\* Mandatory

Is the Program Supplemental Agreement on file?

yes ☐ no ☐, comments:

Is the RE aware of the Program Supplemental Agreement covenants?

yes ☐ no ☐, comments:

Are there source documents supporting progress payments made to contractor?

yes ☐ no ☐, comments:

Are there separate item sheets for each contract item paid? Randomly check.

yes ☐ no ☐, comments:

Is there a method of payment for materials on-hand?

yes ☐ no ☐, comments:

Is there a procedure for Administrative or Labor Compliance deductions?

yes ☐ no ☐, comments:

Do the invoices to the State match progress payments to the contractor?

yes ☐ no ☐, comments:

**Contract Time:**

Is there an established method to account for contract time?

yes ☐ no ☐, comments:

**\*Labor Compliance:**

Are payrolls spot-checked against certified payrolls?

yes ☐ no ☐, comments:

What is the established method?

**EEO/Wage Rate Posters:**

Are the Federal posters posted for every worker to see at, or near, the contractor's office at the construction site or at the workers central gathering point?

yes ☐ no ☐, comments:

**Employee Interviews:**

Is the local agency conducting employee interviews?

yes ☐ no ☐, comments:

Have the interviews been signed and dated?

yes ☐ no ☐, comments:

**OJT:**

Are OJT requirements included in the contract?

yes ☐ no ☐, comments:

Is there documentation to account for the apprentices on the job?

yes ☐ no ☐, comments:

**\*DBE:**

Review Local Agency's Annual Plan on file with DLAE prior to going to survey the Local Agency.

What is the Local Agency's Annual Goal?

Who is the local agency's DBE Liaison Officer?

Obtain copy of the contract Bidder DBE Information Form.

What was the contract DBE goal?

What is the contractor's DBE goal?

If the contractor's goal is less than the contract goal is there a "good faith" statement in the project files?

yes ☐ no ☐, comments:

How is the local agency checking for DBE goal compliance?

Payrolls?

yes ☐ no ☐, comments:

Interviews?

yes ☐ no ☐, comments:

Diaries?

yes ☐ no ☐, comments:

**CCOs:**

Is there a process for CCO approval?

yes ☐ no ☐, comments:

Obtain a list of the approved CCOs.

Randomly check CCOs for Federal-aid eligibility, report on findings.

**Traffic Safety in Highway and Street Work Zones:**

Is there a Traffic Control Plan (TCP) in the PS&E?

yes ☐ no ☐, comments:

Field review the project to see if the TCP agrees with the actual conditions, report on findings.

Is the local agency analyzing construction work site accidents for the purpose of correcting deficiencies which might be found to exist on individual projects and to improve the content of future TCPs?

yes ☐ no ☐, comments:

**Materials Files:**

\*Is there a Quality Assurance Program (QAP) in the project files?

yes ☐ no ☐, comments:

Who approved the QAP?

Does the QAP say that this is the same program that they use for their other transportation-related projects constructed without Federal-aid funding?

yes ☐ no ☐, comments:

Is the local agency adhering to the QAP?

yes ☐ no ☐, comments:

Do the files back it up?

yes ☐ no ☐, comments:

Does the local agency have a procedure for and filing of:

Notice of Materials to be used

yes ☐ no ☐, comments:

To be Inspected

yes ☐ no ☐, comments:

To be Furnished

yes ☐ no ☐, comments:

Materials On-hand

yes ☐ no ☐, comments:

Certifications of Compliance

yes ☐ no ☐, comments:

Buy America” Requirements

yes ☐ no ☐, comments:

Are there Acceptance Sampling and Testing Reports in the files?

yes ☐ no ☐, comments:

Is there a “Summary Log” of tests?

yes ☐ no ☐, comments:

What is the frequency of tests?

Frequency tables used?

yes ☐ no ☐, comments:

Is this a representative sampling of all materials entering into the work?

yes ☐ no ☐, comments:

Are failed tests documented in the files with cross references to re-tests?

yes ☐ no ☐, comments:

Does the Resident Engineer see the test reports?

yes ☐ no ☐, comments:

### **Environmental**

Review local agency’s environmental document for this project prior to job site.

Is the environmental document in the RE’s files?

yes ☐ no ☐, comments:

Is the construction project adhering to the mitigation requirements in the document?

yes ☐ no ☐, comments:

**Additional comments:**

**PR 96-04 Construction Administration**  
**Survey Form for Non-NHS Projects**

**Customer Satisfaction (Leave with Local Agency)**

**LPP 95-07, Attachment 8, Construction Administration**

1. Except for Quality Assurance procedures, and on a scale from 1 to 10, does this document adequately cover Federal requirements for the administration of a Federal-aid project?  
(1=completely inadequate, 10=completely adequate) \_\_\_\_\_
2. What's missing?
3. On a scale of 1 to 10, how would you rate the "User Friendliness"?  
(1=Not friendly at all, 10=Nearly perfect) \_\_\_\_\_
4. What Section is the hardest to understand?
5. What Section is the most understandable?
6. What forms are the most difficult and time consuming to complete?
7. Suggestions for improvements?

**LPP 96-03, Local Quality Assurance Programs**

1. On a scale of 1 to 10, does this document adequately cover Federal requirements for local quality assurance programs?  
(1=completely inadequate, 10=completely adequate) \_\_\_\_\_
2. What's missing?
3. On a scale of 1 to 10, how would you rate the "User Friendliness"?  
(1=Not friendly at all, 10=Nearly perfect) \_\_\_\_\_

4. Suggestions for improvements?



## Caltrans Assistance

Since the reengineering of Local Assistance procedures (effective July 1, 1995), Caltrans is no longer involved in:

- Rating/approving the local agency's ability to administer a Federal-aid construction contract.

(The old Qualification Questionnaire)

- Concurring with the award (including Good Faith determinations).
- Giving prior approval for major Change Orders, and approving Federal participation of all Change Orders.
- Certifying local agency materials testers.
- Review of construction activities (except for process reviews).

However, subject to availability of resources, Caltrans may assist local agencies with questions regarding Construction Administration.

1. Has your agency required Construction Administration assistance from Caltrans since the reengineering? \_\_\_\_\_

2. If, yes, on a scale from 1 to 10, how would you rate this assistance on:

Timeliness? (1= Too late to do any good, 10=Upon demand) \_\_\_\_\_

Quality? (1=Inaccurate, 10=Exactly what was required) \_\_\_\_\_

3. Type of assistance required?

- Training?
- Policy Interpretation?
- Technical assistance?
- Other (describe)?

4. Suggestions for improvements?